IOWA DEPARTMENT OF TRANSPORTATION

To Office Bridges and Structures Date September 4, 2007

Attention All Employees Ref No. 521.1

From Gary Novey

Office Bridges and Structures

Subject MM No. 164 (Stiffener Clearances)

Design Manual 5.5.1.4.2 Detailing

The following policy change has been made for minimum clearances for placing transverse stiffeners next to shop-welded splices for welded plate girder bridges. The minimum spacing in the Bridge Design Manual, "5.5 Steel Girder" article "5.5.1.4.2 Detailing" has been revised as shown.

"Shop welded flange splices shall be at least 6 inches (150 mm) from a stiffener, 6 inches (150 mm) from a web splice, and 4 inches (100 mm) from a shear connector. Web splices shall be at least 6 inches (150 mm) from a stiffener. Splices shall not interfere with other bridge components."

In addition, the standard CADD sheets 4305, 4308, 4309, and 4310 have been revised by adding the following note:

SHOP WELDED FLANGE SPLICES SHALL BE A MINIMUM OF 6 INCHES FROM A STIFFENER, 6 INCHES FROM A WEB SPLICE, AND 4 INCHES FROM A SHEAR CONNECTOR. WEB SPLICES SHALL BE A MINIMUM OF 6 INCHES FROM A STIFFENER. SPLICES SHALL NOT INTERFERE WITH ANY OTHER BRIDGE COMPONENTS. ALL SHOP WELDED BUTT SPLICES SHALL BE SHOWN ON THE SHOP DRAWINGS AND SUBJECT TO APPROVAL BY THE ENGINEER.

This change was requested by the fabricator and is based on what is recommended nationally by AASHTO/NSBA Steel Bridge Collaboration at the web site noted below:

 $http://www.steelbridges.org/collaboration_pages/AASHTO\%20Docs/DDPG-1\%20AASHTO.pdf$

If you have any questions on the updated sheets, please check with me or Dean Bierwagen.

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